

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

Doug Domenech
Secretary of Natural Resources

5636 Southern Boulevard, Virginia Beach, Virginia 23462 (757) 518-2000 Fax (757) 518-2009 www.deq.virginia.gov

David K. Paylor Director

Maria R. Nold Regional Director

October 12, 2012

Mr. Sean S. Heaney, P.E. Director of Environmental Compliance Naval Medical Center - Portsmouth 1510 Gilbert Street Norfolk, Virginia 23511-2737

Location: Portsmouth Registration No.: 60293
AFS Id. No.: 51-740-00007

Dear Mr. Heaney:

Attached is a permit to operate the Naval Medical Center - Portsmouth facility, pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the New Source Review permit dated April 13, 2012.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on July 20, 2012 and solicited written public comments by placing a newspaper advertisement in the Virginian-Pilot on Monday, August 27, 2012. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on Wednesday, September 26, 2012 with no comments having been received in this office.

This approval to operate does not relieve Naval Medical Center - Portsmouth of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Mr. Sean S. Heaney Naval Medical Center - Portsmouth October 12, 2012 Page 2

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality PO Box 1105 Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Rule 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Kelly R. Glles by phone at (757) 518-2155 or by e-mail at kelly giles@deq.virginia.gov.

Sincerely,

Troy 19. Breathwaite

Regional Air Permits Manager

TDB/KRG/60293\_005\_12\_TV Renewal\_cvrltr NMCP.docx

Attachment: Permit

CC:

Manager, Data Analysis (electronic file submission)

Manager/Inspector, Air Compliance

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)



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Maria R. Nold Regional Director

## **Federal Operating Permit** Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Doug Domenech Secretary of Natural Resources

United States Navy - Naval Medical Center, Portsmouth

**Facility Name:** 

Naval Medical Center, Portsmouth

**Facility Location:** 

620 John Paul Jones Circle

Portsmouth, Virginia 23708

Registration Number:

60293

Permit Number:

TRO-60293

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through IX)

November 14, 2012

Effective Date

**November 13, 2017** 

**Expiration Date** 

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# I. Facility Information

Permittee
United States Navy
Commander
Navy Region, Mid-Atlantic
1510 Gilbert Street
Norfolk, Virginia 23511-2737

Facility
Naval Medical Center, Portsmouth
620 John Paul Jones Circle
Portsmouth, Virginia 23708-2197

Contact Persons
Ms. Meredith Cutchin
Environmental Compliance
Building N-26, Room 3208
1510 Gilbert Street
Norfolk, Virginia 23511-2737
(757) 341-0432
Meredith.cutchin@navy.mil

Responsible Official
Mr. Sean Heaney
Director of Environmental Compliance

County-Plant Identification Number: 51-740-00007

Facility Description: NAICS 622 – Hospitals SIC 80 – Health Services

Industries in the Hospitals subsector provide medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity. Establishments in the Hospitals subsector provide inpatient health services, many of which can only be provided using the specialized facilities and equipment that form a significant and integral part of the production process.

NAICS 6221 – General Medical and Surgical Hospitals NAICS 62211- General Medical and Surgical Hospitals SIC 806 – Hospitals SIC 8062 - General Medical and Surgical Hospitals

This industry comprises establishments known and licensed as general medical and surgical hospitals primarily engaged in providing diagnostic and medical treatment (both surgical and nonsurgical) to inpatients with any of a wide variety of medical conditions. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. These hospitals have an organized staff of physicians and other medical staff to provide patient care services. These establishments usually provide other services, such as outpatient services, anatomical pathology services, diagnostic X-ray services, clinical laboratory services, operating room services for a variety of procedures, and pharmacy services.

# II. Emission Units

Equipment to be operated consists of:

| Emissions Unit ID | Stack ID              | Emissions Unit Description        | Size/Rated Heat<br>Input Capacity,<br>mmBTU/hr | Max<br>Rated<br>Output<br>(Note 1) | Applicable<br>NSR<br>Permit |
|-------------------|-----------------------|-----------------------------------|------------------------------------------------|------------------------------------|-----------------------------|
| NMC-20-Boil-105   | STBOIL-100            | Nebraska Boiler NS-C-39S, 6/1/87  | 30.1                                           | 30,000 lb                          | 4/13/2012                   |
| NMC-20-Boil-106   | STBOIL-100            | Nebraska Boiler NS-C-39S, 3/15/86 | 36.0                                           | 30,000 lb                          | 4/13/2012                   |
| NMC-20-Boil-107   | STBOIL-100            | Nebraska Boiler NS-C-39, 9/15/83  | 37.6                                           | 30,000 lb                          | 4/13/2012                   |
| NMC-20-Boil-108   | STBOIL-100            | Nebraska Boiler NSB37, 1/15/82    | 24.0                                           | 20,000 lb                          | 4/13/2012                   |
| NMC-20-Boil-109   | STBOIL-100            | Cleaver Brooks 200-CT-7, Nov 94   | 51.0                                           | 40,000 lb                          | 4/13/2012                   |
| NMC-20-Boil-110   | STBOIL-100            | Cleaver Brooks 200-CT-7, Nov 94   | 51.0                                           | 40,000 lb                          | 4/13/2012                   |
| NMC-20-ICGF-002   | STICGF-002<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-20-ICGF-003   | STICGF-003<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-20-ICGF-004   | STICGF-004<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-20-ICGF-005   | STICGF-005<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-20-ICGF-006   | STICGF-006<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-20-ICGF-007   | STICGF-007<br>Bldg 20 | Cummins Engine KTTA50-G2, May 95  | 10.2                                           | 1,000 kW<br>(72%)<br>(1342 hp)     | 4/13/2012                   |
| NMC-3-ICGF-008    | STICGF-008<br>Bldg 3  | Caterpillar Engine 3408B, 1989    | 4.50                                           | 380 kW<br>(510 hp)                 | 4/13/2012                   |

| NMC-3-ICGF-009   | STICGF-009<br>Bldg 3   | Caterpillar Engine 3412, 1989   | 3.91 | 330 kW<br>(443 hp) | 4/13/2012 |
|------------------|------------------------|---------------------------------|------|--------------------|-----------|
| NMC-3-ICGF-010   | STICGF-010<br>Bldg 3   | Caterpillar Engine 3408B, 1989  | 4.50 | 380 kW<br>(510 hp) | 4/13/2012 |
| NMC-275-ICGF-011 | STICGF-011<br>Bldg 275 | Cummins Engine NTA-855-G2, 1993 | 4.06 | 300 kW<br>(402 hp) | 4/13/2012 |
| NMC-150-ICGF-012 | STICGF-012<br>Bldg 150 | Caterpillar Engine 3306TA, 1999 | 2.41 | 230 kW<br>(308 hp) | 4/13/2012 |
| NMC-273-ICGF-013 | STICGF-013<br>Bldg 273 | Caterpillar Engine 3306B, 1991  | 2.44 | 180 kW<br>(241 hp) | 4/13/2012 |
| NMC-273-ICGF-015 | STICGF-015<br>Bldg 273 | Caterpillar Engine 3208, 1986   | 2.17 | 160 kW<br>(215 hp) | 4/13/2012 |
| NMC-250-ICGF-017 | STICGF-017<br>Bldg 250 | Caterpillar Engine 3406, Feb 95 | 3.73 | 300 kW<br>(402 hp) | 4/13/2012 |
| NMC-274-ICGF-019 | STICGF-019<br>Bldg 274 | Cummins Engine KTA-19T2, 1993   | 4.74 | 400 kW<br>(536 hp) | 4/13/2012 |
| WOOD-001         | NA                     | Woodworking Shop                | NA   | NA NA              | NA        |

Note 1: Output units are lb steam/hr for boilers and kW (% of prime power) electrical output for IC generator units. \*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

## III. Boiler Requirements

#### A. Limitations

- 1. **Boiler Emission Controls** Boiler emissions shall be controlled by proper operation and maintenance. (9 VAC 5-80-110 and Condition 3 of NSR Permit issued April 13, 2012)
- 2. **Boiler Fuel** The approved fuels for the six boilers (NMC-20-Boil-105 through NMC-20-Boil-110) are as listed in the table below. A change in the fuels may require a permit to modify and operate.

| Reference No.   | Approved Fuel         |
|-----------------|-----------------------|
| NMC-20-Boil-105 |                       |
| NMC-20-Boil-106 |                       |
| NMC-20-Boil-107 | Natural Gas           |
| NMC-20-Boil-108 | Distillate Oil/Diesel |
| NMC-20-Boil-109 |                       |
| NMC-20-Boil-110 | ·                     |

(9 VAC 5-80-110 and Condition 4 of NSR Permit issued April 13, 2012)

3. **Boiler Fuel Throughput** - The throughput limits for the six boilers (NMC-20-Boil-105 through NMC-20-Boil-110), combined, are listed in the table below. These annual limits are calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

| Reference                          | No.        | Fuel                  | Limit                                    |
|------------------------------------|------------|-----------------------|------------------------------------------|
| NMC-20-Boil-105                    |            | N . 10                | gan 106 1: C                             |
| NMC-20-Boil-106<br>NMC-20-Boil-107 |            | Natural Gas           | 700 x10 <sup>6</sup> cubic feet per year |
| NMC-20-Boil-107                    | (combined) |                       |                                          |
| NMC-20-Boil-109                    |            | Distillate Oil/Diesel | 5,430,000 gallons per year               |
| NMC-20-Boil-110                    |            |                       |                                          |

When both distillate oil/diesel and natural gas are consumed in the same consecutive 12 months, consumption shall be limited by the following:

Gallons of oil = 
$$5,430,000 - (0.007 \times \text{ft}^3 \text{ of natural gas})$$
  
Cubic feet of natural gas =  $700 \times 10^6 - (143 \times \text{gallons of oil})$ 

(9 VAC 5-80-110 and Condition 5 of NSR Permit issued April 13, 2012)

4. Boiler Fuel – The distillate oil/diesel shall meet the specifications below:

DISTILLATE OIL/DIESEL which meets the ASTM D396 or D975 specification for numbers 1 or 2 fuel oil: Maximum sulfur content per shipment:

0.5 %

(9 VAC 5-80-110 and Condition 6 of NSR Permit issued April 13, 2012)

- 5. Boiler Fuel Certification The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil/diesel. Each fuel supplier certification shall include the following:
  - The name of the fuel supplier;
  - b. The date on which the distillate oil/diesel was received;
  - c. The quantity of distillate oil/diesel delivered in the shipment; and
  - d. A statement that the distillate oil/diesel complies with the American Society for Testing and Materials specifications (ASTM D396 or D975) for numbers 1 or 2 fuel oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition number III.A.4. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110, 40 CFR 60.48c(f)(1) and Condition 7 of NSR Permit issued April 13, 2012)

6. Boiler Emission Limits – Emissions from the common stack resulting from the operation of the boilers, as described in the table, shall not exceed the limits specified below:

| Pollutant                                   | NMC-20-Boil-<br>NMC-20-B<br>COMBI | oil-108,<br>NED | NMC-20-Boil-109<br>and<br>NMC-20-Boil-110,<br>EACH | All Boilers<br>(NMC-20-Boil-105<br>through<br>NMC-20-Boil-110)<br>COMBINED |
|---------------------------------------------|-----------------------------------|-----------------|----------------------------------------------------|----------------------------------------------------------------------------|
|                                             | (lb/mmBtu)                        | (lb/hr)         | (lb/hr)                                            | (ton/yr)                                                                   |
| PM (filterable + condensable)               | 0.024                             | 3.0             | 2.4                                                | 9.0                                                                        |
| PM-10 <sub>(filterable + condensable)</sub> | 0.012                             | 1.5             | 1.2                                                | 6.2                                                                        |
| SO <sub>x</sub>                             | 0.5                               | 65.0            | 26.5                                               | 194.9                                                                      |
| Nitrogen Oxides (as NO <sub>2</sub> )       | 0.14                              | 18.1            | 7.4                                                | 54.3                                                                       |
| CO                                          | 0.035                             | 4.5             | 1.8                                                | 13.6                                                                       |
| VOC                                         | 0.003                             | 0.4             | 0.1                                                | 1.0                                                                        |

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of operating limits shall be considered credible evidence of emission limits. Compliance with these emission limits may be determined from operating limits as stated in Condition numbers III.A.1-5, III.A.7 and III.B – III.D.

(9 VAC 5-80-110 and Condition 8 of NSR Permit issued April 13, 2012)

7. Boiler Visible Emission Limits – Visible emissions, as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A), from the common stack resulting from the operation of each boiler listed, shall not exceed the limits specified below:

| Equipment/Reference No.                                                                                        | Opacity Limit        | Except during one six-minute<br>period in any one hour in which<br>visible emissions shall not exceed |
|----------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------|
| NMC-20-Boil-105<br>NMC-20-Boil-106<br>NMC-20-Boil-107<br>NMC-20-Boil-108<br>NMC-20-Boil-109<br>NMC-20-Boil-110 | 10%<br>(Each Boiler) | 20%<br>(Each Boiler)                                                                                  |

This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 9 of NSR Permit issued April 13, 2012)

#### B. Monitoring and Recordkeeping

- 1. Boiler Visual Emissions Observations The permittee shall perform a monthly visual emissions observation on each boiler stack during normal operations. If such visual observation indicates any visible emissions, the permittee shall take corrective actions to eliminate the visible emissions. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR Part 60, Appendix A, Method 9 for six minutes. If the six-minute VEE opacity average exceeds 50% of the standard for a specific unit, the VEE for that unit shall continue for an additional 12 minutes. If any of the six-minute averages during the 18 minutes exceeds the standard for a specific unit, the VEE for that unit shall continue for one hour from initiation on the stack to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations (date, time, boilers operating, fuel(s) used, name of observer, and conditions during observation), VEE, a description of corrective actions performed, and the date corrective actions were performed. The records shall be kept at the facility and made available for inspection by the DEQ for the most recent five (5) year period.

  (9 VAC 5-80-110 E)
- 2. Boiler On-Site Records The permittee shall maintain records of emissions data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Monthly and annual throughput of natural gas (in cubic feet) and distillate oil/diesel (in gallons) in each NSPS Dc boiler (NMC-20-Boil-109 and NMC-20-Boil-110). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
  - b. Annual throughput of natural gas (in cubic feet) and distillate oil/diesel (in gallons) in boilers (NMC-20-Boil-105 through NMC-20-Boil-108), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

- c. Annual throughput of natural gas (in cubic feet) and distillate oil/diesel (in gallons) in all boilers, combined (NMC-20-Boil-105 through NMC-20-Boil-110), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
- d. All fuel supplier certifications;
- e. Records as necessary to demonstrate compliance with Condition III.A.1 and III.A.5; and
- f. Records of visual emissions observations, as required by Condition III.B.1.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) year period.

(9 VAC 5-80-110 and Condition 19 of NSR Permit issued April 13, 2012)

#### C. Testing

- Testing/Monitoring Ports for Boilers Boilers (NMC-20-Boil-105 NMC-20-Boil-110) shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110 and Condition 20 of NSR Permit issued April 13, 2012)
- Additional Testing If testing is conducted in addition to the monitoring specified in this permit, the
  permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
  (9 VAC 5-80-110)

#### D. Reporting

- 1. Semi-annual Fuel Quality Reports The permittee shall submit fuel quality reports for distillate oil/diesel fired in NSPS Dc boilers (NMC-20-Boil-109 and NMC-20-Boil-110) to the Director, Tidewater Regional Office, postmarked no later than the 30<sup>th</sup> day following the end of each semiannual period ending June 30<sup>th</sup> and December 31<sup>st</sup>. If no shipments of distillate oil/diesel for those emissions units were received during the semiannual period, the fuel quality report shall consist of the dates included in the semiannual period and a statement that no distillate oil was received during the semiannual period. If distillate oil was received during the reporting period, the report shall include:
  - a. The dates included in the semiannual period.
  - b. A copy of all fuel supplier certifications for all shipments of distillate oil/diesel for the NSPS Dc boilers received during the reporting period, indicating the supplier, volume of shipment, sulfur content (weight percent) and date the shipment was received.
  - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications represent all of the distillate oil/diesel burned in the NSPS Dc boilers or received at the facility for use in the NSPS Dc boilers during the reporting period.

(9 VAC 5-80-110 and Condition 21 of NSR Permit issued April 13, 2012)

Naval Medical Center Portsmouth Permit Number: TRO-60293 October 12, 2012

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#### E. MACT JJJJJJ - Area Source Boilers

- 1. MACT JJJJJJ The existing, institutional area source boilers > 10 mmBtu/hr (NMC-20-Boil-105 NMC-20-Boil-110) shall be in compliance with 40 CFR Part 63, Subpart JJJJJJ as follows:
  - a. At all times, the permittee shall operate and maintain each affected unit in a manner consistent with safety and good air pollution control practices for minimizing emissions as specified in 40 CFR 63.11205(a);
  - b. Conduct an initial performance tune-up according to 40 CFR 63.11223(b) and submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up for each boiler;
  - c. Conduct an energy assessment according to Table 2 of MACT JJJJJJ, as required by 40 CFR 63.11214(c) and submit a signed certification in the Notification of Compliance Status report that an energy assessment of each boiler and its energy use systems was completed and submit, upon request, the energy assessment report;
  - d. Conduct biennial performance tune-ups according to 40 CFR 63.11223 no more than 25 months after the previous tune-up for each boiler and keep records as required in 40 CFR 63.11225(c) to demonstrate continuous compliance;
  - e. Submit the applicable notifications specified in 40 CFR 63.11225(a)(1) through (a)(5);
  - f. Prepare, and submit upon request, a biennial compliance report as specified in 40 CFR 63.11225(b);
  - g. Maintain records as specified in 40 CFR 63.11225(c). Records shall be kept in accordance with 40 CFR 63.10(b)(1) and shall be kept for a 5 year period following each recorded action;
  - h. Notification shall be submitted as per 40 CFR 63.11225(f) prior to commencing combustion of solid waste in the boilers; and
  - i. Notification shall be submitted as per 40 CFR 63.11225(g) prior to switching fuels that may result in the applicability of a different subcategory under MACT JJJJJJ or a switch out of MACT JJJJJJ due to a switch to 100 percent natural gas.

(9 VAC 5-80-110 and 40 CFR 63 Subpart JJJJJJ)

## IV. Generator Requirements

#### A. Limitations

- 1. Engine Emission Controls The engine generator sets shall be controlled by proper operation and maintenance.
  - (9 VAC 5-80-110 and Condition 3 of NSR Permit issued April 13, 2012)
- 2. Engine Emission Controls Nitrogen oxide emissions from each of the six engine generator sets (NMC-20-ICGF-002 through NMC-20-ICGF-007) shall be controlled by the use, during all operations, of an electronic governor circuit on each engine that is designed to derate each engine from a maximum capacity of 1855 hp to 1450 hp. Each generator is limited to 1000 kW.
  - (9 VAC 5-80-110 and Condition 11 of NSR Permit issued April 13, 2012)
- 3. Type of Engine Operations The engine generator sets shall be used to provide electrical power to Naval Medical Center, Portsmouth, as listed in the table below:

| Refere                                                                                     | nce No.                                                                      | Type of Operation                                                         |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| NMC-20-ICGF-002<br>NMC-20-ICGF-003<br>NMC-20-ICGF-004                                      | NMC-20-ICGF-005<br>NMC-20-ICGF-006<br>NMC-20-ICGF-007                        | ELRP (Independent System Operator (ISO) declared emergency) and Emergency |
| NMC-3-ICGF-008<br>NMC-3-ICGF-009<br>NMC-3-ICGF-010<br>NMC-275-ICGF-011<br>NMC-150-ICGF-012 | NMC-273-ICGF-013<br>NMC-273-ICGF-015<br>NMC-250-ICGF-017<br>NMC-274-ICGF-019 | Emergency Only                                                            |

The Emergency Only generator sets as noted above shall be used only for providing electrical power during the interruption of service from the normal power supplier, periodic maintenance testing, and operational training. Only those units designated as participating in the Emergency Load Response Program (ELRP) may also operate during ELRP declared emergencies. Other than the ELRP, the designated participating emergency generators shall <u>not</u> operate voluntarily for the purpose of peak-shaving, demand response or as part of any other interruptible power supply arrangement with a power provider, other market participant or system operator, without first receiving permission from the DEQ.

(9 VAC 5-80-110 and Condition 12 of NSR Permit issued April 13, 2012)

- 4. Engine Operation Limitations Any operation of the ELRP engine generator sets (NMC-20-ICGF-002 NMC-20-ICGF-007) other than emergency operation, maintenance and testing and operation in non-emergency situations, as described below, is prohibited. Operation of any unit(s) outside of the requirements listed below will result in the unit(s) to not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and will need to meet all of the requirements for non-emergency engines of this subpart.
  - a. There is no time limit on the use of the emergency generators in emergency situations;
  - b. Operation of the emergency generators for the purpose of maintenance checks and readiness testing is limited to 100 hours per year; and
  - c. Operation of the emergency generators in non-emergency situations is limited as per 40 CFR 63.6640(f)(iii).
  - (9 VAC 5-80-110 and 40 CFR 63.6640(f))

5. Engine Generator Fuel - The approved fuels for the fifteen (15) engine generator sets are as listed in the table below. A change in the fuel may require a permit to modify and operate.

| Refere                                                                                                                                             | ence No.                                                                                                                               | Approved Fuel         |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| NMC-20-ICGF-002<br>NMC-20-ICGF-003<br>NMC-20-ICGF-004<br>NMC-20-ICGF-005<br>NMC-20-ICGF-006<br>NMC-20-ICGF-007<br>NMC-3-ICGF-008<br>NMC-3-ICGF-009 | NMC-3-ICGF-010<br>NMC-275-ICGF-011<br>NMC-150-ICGF-012<br>NMC-273-ICGF-013<br>NMC-273-ICGF-015<br>NMC-250-ICGF-017<br>NMC-274-ICGF-019 | Distillate Oil/Diesel |

(9 VAC 5-80-110 and Condition 13 of NSR Permit issued April 13, 2012)

6. Facility-wide Engine Generator Fuel Throughput - The throughput limit for the six ELRP engine generator sets (NMC-20-ICGF-002 through NMC-20-ICGF-007) and nine emergency-only engine generator sets (NMC-3-ICGF-008 through NMC-274-ICGF-019), combined, is listed in the table below:

|                                                                                                                                                    | Reference No.                                                                                                                          |            | Limit                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------|
| NMC-20-ICGF-002<br>NMC-20-ICGF-003<br>NMC-20-ICGF-004<br>NMC-20-ICGF-005<br>NMC-20-ICGF-006<br>NMC-20-ICGF-007<br>NMC-3-ICGF-008<br>NMC-3-ICGF-009 | NMC-3-ICGF-010<br>NMC-275-ICGF-011<br>NMC-150-ICGF-012<br>NMC-273-ICGF-013<br>NMC-273-ICGF-015<br>NMC-250-ICGF-017<br>NMC-274-ICGF-019 | (combined) | 784,000 gallons of<br>distillate oil/diesel<br>per year |

These annual limits are calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 14 of NSR Permit issued April 13, 2012)

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7. Engine Fuel - The distillate oil/diesel shall meet the specifications below:

DISTILLATE OIL/DIESEL which meets the ASTM D396 or D975 specification for numbers 1 or 2 fuel oil: Maximum sulfur content per shipment:

0.5 %

(9 VAC 5-80-110 and Condition 15 of NSR Permit issued April 3, 2012)

- 8. Engine Fuel Certification The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil/diesel. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the distillate oil/diesel was received;
  - c. The quantity of distillate oil/diesel delivered in the shipment; and
  - d. A statement that the distillate oil/diesel complies with the American Society for Testing and Materials specifications (ASTM D396 or D975) for numbers 1 or 2 fuel oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition IV.A.7. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110 and Condition 16 of NSR Permit issued April 13, 2012)

9. Engine Emission Limits – Emissions from the operation of the engine generator sets (NMC-20-ICGF-002 through NMC-20-ICGF-007) and emergency engine generator sets (NMC-3-ICGF-008 through NMC-274-ICGF-019) shall not exceed the limits specified below:

| Pollutant                             | NMC-20-ICGF-002<br>through<br>NMC-20-ICGF-007<br>EACH<br>(lb/hr) | All Engines<br>COMBINED |
|---------------------------------------|------------------------------------------------------------------|-------------------------|
| PM                                    | 3.6                                                              | 19.6                    |
| PM-10                                 | 3.6                                                              | 19.6                    |
| SO <sub>x</sub>                       | 5.4                                                              | 29.4                    |
| Nitrogen Oxides (as NO <sub>2</sub> ) | 33.2                                                             | 180.2                   |
| CO                                    | 6.4                                                              | 35.0                    |
| VOC                                   | 0.9                                                              | 5.1                     |

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined from operating limits as stated in Condition numbers IV.A.1-7, IV.A.10, and IV.B-IV.D.

(9 VAC 5-80-110 and Condition 17 of NSR Permit issued April 13, 2012)

10. Engine Visible Emission Limit - Visible emissions, as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A), from the equipment listed shall not exceed the limits specified below:

| Equipment/Reference No.                                                                                                                           | Opacity Limit<br>(Each Generator) | Except during one six-<br>minute period in any one<br>hour in which visible<br>emissions shall not exceed<br>(Each Generator) |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Each of the ELRP engine generator sets  NMC-20-ICGF-002 NMC-20-ICGF-005  NMC-20-ICGF-003 NMC-20-ICGF-006  NMC-20-ICGF-004 NMC-20-ICGF-007         | 15%                               | 20%                                                                                                                           |
| Each of the emergency-only engine generator sets  NMC-3-ICGF-008 NMC-3-ICGF-009 NMC-3-ICGF-010 NMC-275-ICGF-011 NMC-274-ICGF-011 NMC-150-ICGF-012 | 5   20%<br>7                      | 30%                                                                                                                           |

This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and Condition 18 of NSR Permit issued April 13, 2012)

#### **B.** Monitoring

- 1. Engine Visible Observations Periodic visual observations of stack emissions shall be conducted at least monthly on ELRP/Emergency engine generators (NMC-20-ICGF-002 through NMC-20-ICGF-007), during periods of normal facility preventive maintenance, for a sufficient time to determine the presence of visible emissions. Records shall include, at a minimum, the date, time, emissions unit ID, observations results and observer's name. Performance of periodic visual observations does not require smoke school training. The record shall characterize the observed engine exhaust as "Clear", "Slight", or "Visible Smoke" (and note the percent opacity if the observer is a qualified smoke reader). If "Visible Smoke" is noted, the record shall also indicate the following:
  - a. The color of the emissions (black or white);
  - b. Whether the emissions are representative of normal operations;
  - c. If not representative of normal operations, the cause of the abnormal emissions;
  - d. The duration of any visible emissions incident; and
  - e. Any corrective actions taken to eliminate visible emissions.

The permittee shall perform an annual visible emissions evaluation for each of the six ELRP/Emergency engine generators (NMC-20-ICGF-002 through NMC-20-ICGF-007) in accordance with 40 CFR 60, Appendix A, Method 9, to establish baselines for expected visible emissions. The annual visible emissions evaluation shall be performed for at least a 6 minute period of time.

Visual observations shall be conducted annually, in accordance with 40 CFR 60, Appendix A, Method 9, on each of the operational emergency-only engine generators (NMC-3-ICGF-008 through NMC-274-ICGF-019) that operate in excess of 100 hours during the previous calendar year. (9 VAC 5-80-110K)

## C. Recordkeeping

- 1. Engine On-Site Records The permittee shall maintain records of all emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Monthly and annual throughput of distillate oil/diesel (in gallons) for the six engine generators (NMC-20-ICGF-002 through NMC-20-ICGF-007), combined. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Monthly and annual throughput of distillate oil/diesel (in gallons) in the emergency engine generators (NMC-3-ICGF-008 through NMC-274-ICGF-019), combined. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - c. Records of maximum electric load production levels for engines (NMC-20-ICGF-002 through NMC-20-ICGF-007) sufficient to demonstrate continuing compliance with Condition IV.A.2.
  - d. All fuel supplier certifications.
  - e. Hours of operation and reasons for operation of each designated participating ELRP emergency generator, including documentation of an ELRP declared emergency, normal emergency operation, testing of the unit and/or maintenance.
  - f. Records of periodic visual observations and Method 9 visible emissions evaluations as required by Condition IV.B.1.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 19 of NSR Permit issued April 13, 2012)

#### D. Testing

- Testing/Monitoring Ports for Engine Generators The engine generators (NMC-20-ICGF-002 through NMC-20-ICGF-007) shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations. (9 VAC 5-80-110 and Condition 20 of NSR Permit issued April 13, 2012)
- 2. Additional Testing If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# V. Woodworking Equipment Requirements

#### A. Limitations

 Woodworking Emission Controls - Particulate emissions shall not be discharged into the atmosphere from woodworking operations without providing, as a minimum, adequate ductwork and properly designed collectors or other such devices, as approved by the board.
 (9 VAC 5-80-110 and 9 VAC 5-40-2270A)

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 Woodworking Emission Limit - Particulate emission from the operation of woodworking equipment shall not exceed 0.05 grains per dry standard cubic foot of exhaust gas. (9 VAC 5-80-110 and 9 VAC 5-40-2270B)

3. Woodworking Visible Emission Limit - Visible emissions from the collector vent for woodworking operations shall not exceed twenty (20) percent opacity, except during one 6-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-80-110 and 9 VAC 5-50-80)

#### B. Monitoring and Recordkeeping

- 1. Woodworking Monitoring and Visible Emission Check The permittee shall inspect the emissions capture and control device, and ductwork, annually for evidence of wear which could lead to equipment failure. This inspection shall include a visible emissions check at the cyclone exhaust during normal equipment operation, and while equipment is operating. If visible emissions are present, the permittee shall perform an EPA Method 9 visible emissions evaluation for a minimum of 6 minutes (reference 40 CFR 60, Appendix A). Corrective action shall be completed as necessary and as indicated by the Method 9 visible emissions evaluation. The system should be periodically checked to ensure the sawdust drum is not full. (9 VAC 5-80-110)
- 2. Woodworking On-Site Records The permittee shall maintain records of the following:
  - a. Each periodic visible emissions check;
  - b. Any corrective action taken on the cyclone or exhaust duct system; and,
  - c. Any Method 9 visible emissions evaluation performed on the cyclone exhaust.

These records shall be available for inspection by the DEQ, and shall be current for the most recent five years. (9 VAC 5-80-110)

#### C. Testing

Additional Testing - If testing is conducted in addition to the monitoring specified in this permit, the
permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

# VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

| Emissions<br>Unit No. | Emissions Unit<br>Description                                                                    | Citation<br>Code* | Pollutant(s) Emitted<br>(5-80-720 B)                                                                  | Rated<br>Capacity<br>(5-80-720C) |
|-----------------------|--------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------|----------------------------------|
| GSTA-001              | Vehicle Maintenance Facility<br>Gasoline/Diesel Pumping Tank                                     | 2                 | 2,2,4-Trimethylpentane,<br>Benzene, Ethylbenzene, Hexane,<br>Toluene, VOC, Xylenes (mixed<br>isomers) | NA                               |
| LABS-ALL              | Lab Hoods in the Charette Health Care Center                                                     | 2                 | Formaldehyde, Methanol, VOC,<br>Xylenes(mixed isomers)                                                | NA                               |
| LABS-012              | Still Room, Sterilization Material<br>Recycling Process in the Central<br>Energy Plant (Bldg 20) | 2                 | Formaldehyde, VOC, Xylenes (mixed isomers)                                                            | NA                               |
| OCOM-<br>ALL          | Space Heaters<br>(<0.3 mmBTU/hr)                                                                 | 1                 | Carbon monoxide, PM, PM <sub>10</sub> ,<br>NO <sub>x</sub> , SO <sub>x</sub> , VOC                    | NA                               |
| TNKA-002              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | VOC                                                                                                   | NA                               |
| TNKA-003              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-008              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-009              | Distillate Fuel Oil No. 2<br>Storage Tank (55,000 gallons)                                       | 2                 | voc                                                                                                   | NA                               |
| TNKA-010              | Distillate Fuel Oil No. 2<br>Storage Tank (55,000 gallons)                                       | 2                 | VOC                                                                                                   | NA                               |
| TNKA-011              | Distillate Fuel Oil No. 2 Storage                                                                | 2                 | VOC                                                                                                   | NA                               |
| TNKA-018              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-019              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | VOC                                                                                                   | NA                               |
| TNKA-020              | PWC 2,000 gallon<br>Gasoline Storage Tank                                                        | 2                 | VOC                                                                                                   | NA                               |
| TNKA-022              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | VOC                                                                                                   | NA                               |
| TNKA-024              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-025              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-026              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |
| TNKA-027              | Horizontal Fixed Roof, Distillate<br>Fuel Oil No. 2 Storage Tank                                 | 2                 | voc                                                                                                   | NA                               |

| Emissions<br>Unit No. | Emissions Unit Description                                        | Citation<br>Code* | Pollutant(s)<br>Emitted<br>(5-80-720 B) | Rated Capacity<br>(5-80-720C) |
|-----------------------|-------------------------------------------------------------------|-------------------|-----------------------------------------|-------------------------------|
| TNKA-028              | Horizontal Fixed Roof, Distillate Fuel<br>Oil No. 2 Storage Tank  | 2                 | voc                                     | NA                            |
| TNKA-029              | Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank     | 2                 | VOC                                     | NA                            |
| TNKA-030              | Horizontal Fixed Roof, Distillate Fuel<br>Oil No. 2 Storage Tank  | 2                 | VOC                                     | NA                            |
| TNKA-031              | MWR 250 gallon Gasoline Tank                                      | 2                 | VOC                                     | NA                            |
| TNKA-032              | Horizontal Fixed Roof, Distillate Fuel<br>Oil No. 2 Storage Tank  | 2                 | VOC                                     | NA                            |
| TNKU-004              | Horizontal Underground, Distillate<br>Fuel Oil No. 2 Storage Tank | 2                 | VOC                                     | . NA                          |
| TNKU-006              | Horizontal Underground, Distillate<br>Fuel Oil No. 2 Storage Tank | 2                 | VOC                                     | NA                            |
| TNKU-013              | Horizontal Underground, Lubrication Oil Storage Tank              | 2                 | VOC                                     | NA                            |
| TNKU-014              | Horizontal Underground, Waste Oil<br>Storage Tank                 | 2                 | VOC .                                   | NA                            |
| WSTL-001              | Tank Secondary Containment Oil/Water Separator for TNKA-010       | 2                 | VOC                                     | NA                            |
| WSTL-002              | Tank Secondary Containment Oil/Water Separator for TNKA-011       | 2                 | VOC                                     | NA                            |

#### \*Citation Codes:

- 1 Named insignificant emissions unit
- 2 Insignificant by virtue of emission levels
- 3 Insignificant by size or production level (rated capacity)

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

# VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

| Citation                  | Title of Citation                                                                                                          | Description of Applicability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 CFR 63<br>Subpart ZZZZ | National Emission Standards<br>for Hazardous air Pollutants<br>for Stationary Reciprocating<br>Internal Combustion Engines | MACT ZZZZ exempts existing institutional emergency generators at area sources (see 40 CFR 63.6590 b.3.viii). These units meet the definition for "existing" at an area source as "commenced constructionbefore June 12, 2006" as they were installed in 1995 or earlier. The units also meet the definition of "institutional" as "an emergency stationary RICE used in institutional establishments such as medical centers"  These units are not subject to this regulation so long as they meet the requirements of 40 CFR 63.6640(f). |

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

#### VIII. General Conditions

## A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

#### **B.** Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - The date, place as defined in the permit, and time of sampling or measurements. a.
  - b. The date(s) analyses were performed.
  - The company or entity that performed the analyses. C.
  - d. The analytical techniques or methods used.
  - The results of such analyses.
  - The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-110 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
    - (i) Exceedance of emissions limitations or operational restrictions;
    - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
    - (iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

## D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.
- 7. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9 VAC 5-80-110 K.5)

#### E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the

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breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office. (9 VAC 5-20-180 C)

### G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

### H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

#### I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9 VAC 5-80-110 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

#### K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

#### L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

#### M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions

covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

#### N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material.

  Adequate containment methods shall be employed during sandblasting or similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
   (9 VAC 5-50-90)

#### O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

#### P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

### Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

#### R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- The permit shall not be reopened by the Board if additional applicable state requirements become applicable
  to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
   VAC 5-80-110 L)

## S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

#### T. Transfer of Permits

- No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

#### U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

#### W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

### X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

#### Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

## Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

#### AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

## **BB.Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

# IX. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

- 1. 9 VAC 5-40-140 Existing Source Standard for Odor
- 2. 9 VAC 5-50-140 New and Modified Source Standard for Odorous Emissions
- 3. 9 VAC 5, Chapter 60, Article 4 Toxic Pollutants from Existing Sources
- 4. 9 VAC 5, Chapter 60, Article 5 Toxic Pollutants from New and Modified Sources (9 VAC 5-80-110 N and 9 VAC 5-80-300)